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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,580	01/30/2001	Toshio Nakagishi	P20208	8969
7055	7590	08/11/2004		
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
			EXAMINER AGGARWAL, YOGESH K	
			ART UNIT 2615	PAPER NUMBER 4

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,580

Applicant(s)

NAKAGISHI ET AL.

Examiner

Yogesh K Aggarwal

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2, 04/12/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funahashi et al. (US Patent # 6,304,727) in view of Konno et al. (US Patent # 6,157,781).

[Claims 1 and 3]

A lens unit structure for a camera, comprising a photographing lens block (figure 2, lens block corresponds to lenses G1, G2, G3 etc.) and a finder block (figure 1, element 1), wherein said photographing lens block includes: a lens barrel (figure 1, element 5) having a plurality of guide shaft members (figure 2, element 2b and figure 1, element 2a) extending in parallel with an optical axis (figure 2, optical axis shown as X) of said photographing lens block, ends of said plurality of guide shaft members being secured to said lens barrel (Col. 3 lines 16-28) ; and at least one lens group (figure 2, element G3) accommodated in said lens barrel, said at least one lens group being slidably supported in the direction of said optical axis by said plurality of guide shaft members (col. 3 lines 58-65, figure 2), said plurality of guide shaft members preventing said at least one lens group from moving in a direction perpendicular to the optical axis of said photographing lens block (col. 3 lines 16-18, col. 3 lines 58-61, Figure 2 shows that the lenses slidable only in the perpendicular direction), wherein said finder block includes a casing (figure 1, element 1) that accommodates a finder optical system, said casing having a plurality of holes respectively receiving said plurality of guide shaft members provided to said lens barrel (Figures

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1b and 2 show plurality of guide shafts 2a and 2b inserted through holes in the lens frame 5 and the finder mount casing 1).

Funahashi discloses that this phototaking lens and viewfinder to be used in a camera body CB (figure 7) but does not specifically disclose that it can be used in a single reflex digital camera having a lens system and a viewfinder with an image capturing element, and a beam splitter, an image receiving surface of said image capturing element being perpendicular to an optical axis of said beam splitter, said beam splitter splitting the light passed through said photographing lens block into light directed to said finder optical system and light directed to said image capturing element.

However Konno et al. discloses that a single reflex camera used for films can be easily replaced with a CCD (col. 1 lines 15-41, figure 1, element 2) with a beam splitter (figure 1, element 4, and an image receiving surface of said image capturing element being perpendicular to an optical axis of said beam splitter, said beam splitter splitting the light passed through said photographing lens block into light directed to said finder optical system and light directed to said image capturing element (See figure 1)

Therefore taking the combined teachings of Funahashi and Konno et al. it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have the camera system of Funahashi having a lens block and a finder block as shown to be used in a single reflex digital camera having a lens system and a viewfinder with an image capturing element, and a beam splitter, an image receiving surface of said image capturing element being perpendicular to an optical axis of said beam splitter, said beam splitter splitting the light passed through said photographing lens block into light directed to said finder optical system and light

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directed to said image capturing element as disclosed in Konno in order to use it for both film and digital cameras. The benefit of doing so would be to have a detachable lens and viewfinder system provided on a digital camera body as taught in Konno (col. 2 lines 38-42).

[Claim 2]

Funahashi discloses two guide shaft members (2a and 2b), which would inherently require some regulation of positional relationship of an optical axis of said photographing lens block with respect to an optical axis of said finder block.

[Claim 4]

Funahashi discloses two guide shaft members (2a and 2b) along which the lens G3 can be easily slidable maintaining a positional relationship between the optical axis and lenses (col. 3 lines 16-23) so that the optical axis of said lens group coincides with the optical axis of a first lens group (G2)

[Claim 5]

Funahashi teaches that the deviation between the zooming of the lens barrel of the taking lens and the viewfinder is small (col. 1 lines 46-51) which is accomplished by inserting two guide shafts 2a and 2b into the holes provided in the mount 1 and the lens frame 5 leading to an optical alignment between of the photographing lens group and the finder block.

[Claim 10]

Funahashi teaches a plurality of guide shafts 2a and 2b (figure 1b, 2a).

[Claim 11]

Funahashi teaches in figure 1b guide shafts 2a and 2b opposite to each other with respect to an optical axis.

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[Claim 12]

Funahashi teaches G1 is an objective lens (col. 2 lines 48-51).

3. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funahashi et al. (US Patent # 6,304,727) in view of Konno et al. (US Patent # 6,157,781) as applied to claim 3 above and in further view of Misaka (US Patent # 6,147,810).

[Claim 6]

Funahashi in view of Konno teaches zooming lenses but does not teach wherein the first lens can be a focusing lens. However Misaka teaches that a zooming lens can have a focusing sub-unit (col. 4 lines 28-33, figure 3a, element 2a and 2b). Therefore taking the combined teachings of Funahashi and Konno et al. it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have the camera system of Funahashi having a zooming lens with a focusing subunit to have a compact structure. The benefit of doing so would be to have a small-sized zoom lens in which the displacement of the focus lens unit does not excessively increase during focusing as taught in Misaka (col. 2 lines 21-25).

[Claim 7]

Funahashi teaches in figure 2 that the through holes are provided in the lens frame 5, which holds the zooming lenses G2 and G3 and the focusing subunit as taught in Misaka.

[Claim 8]

Funahashi teaches that G2 and G3 are used for zooming (Abstract)

[Claim 9]

Funahashi teaches in figure 2 that the through holes are provided in the lens frame 5, which holds the zooming lenses G2 and G3.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- i. USP # 4,000,501
- ii. USP # 6,670,989
- iii. USP # 5,444,485
- iv. USP # 6,366,323
- v. USP # 6,643,459
- vi. USP # 5,822,626

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K Aggarwal whose telephone number is (703) 305-0346. The examiner can normally be reached on M-F 9:00AM-5:30PM.

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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YKA

August 6, 2004



TUAN HO
PRIMARY EXAMINER